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Is Moderate Drinking Injurious?

By Dr. Andrew Wilson. See page 196.

HEALTH

A WEEKLY JOURNAL OF

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

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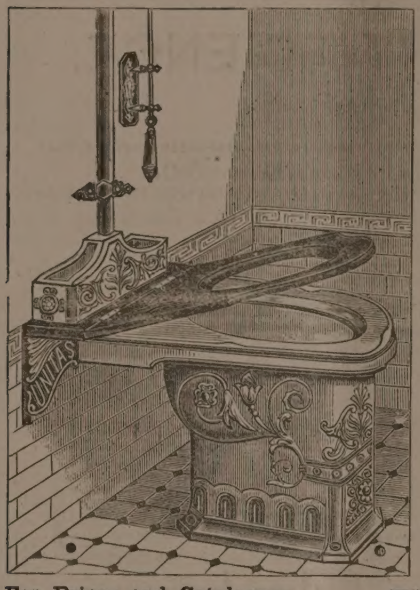

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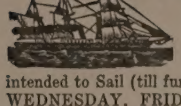

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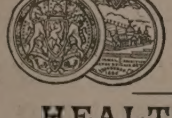

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◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, JUNE* 29, 1888.

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Notes by the Way

BY THE EDITOR.

Health is the foundation of all our physical happiness."—*Herder.*

A CONTINENTAL physician says that he has successfully treated callosities and warts by the application of pure crystallized salicylic acid. The acid is kept in position by moistened boracic lint, and over all there is fastened a piece of gutta-percha tissue. The application is removed after five days, when the hardened growths usually fall off.

✣ ✣ ✣

A REPETITION of the useful hint formerly given in these pages on sea-bathing and deafness may not be inappropriate at the present time. Sea-bathing is a common, but often unsuspected, source of injury to the sense of hearing. People should also be careful how they wash their ears at home. Dr. Abbotts, lately senior physician to the Metropolitan Ear Infirmary, writes: "In this operation, simple though it may appear, and harmless as it is in other respects, a portion of the fluid—small it may be—passes into the outer passage of the ear and becomes lodged there, as it is a difficult matter to dry this passage, especially in the inner half of its extent. The water which thus remains is gradually removed by evaporation and absorption, and a chilled condition of the passage results, highly conducive to inflammation of the part and subsequent impairment of the organ of hearing." To obviate this danger stop the ears with oiled wool.

✣ ✣ ✣

BATHING in the sea is dangerous in other ways for old people, for very young children (especially before the first dentition has been completed), for persons of full habit of body, for those whose circulation is weak or irregular, or who are suffering from heart disease, chronic chest affections, disorders of the brain or nervous system, or local accumulations of blood, such as hemorrhage from the nose, lungs, &c. To the above hints I would add that persons who have suffered from earache, or from ear-discharges after scarlet fever, measles, or other ailments, should be trebly careful about allowing cold water to enter the ears. Many a case of fatal brain-inflammation has been set up in such persons by the ear-irritation produced through bathing, by sea water gaining admittance to the ear-passage.

✣ ✣ ✣

JUDGING from some remarks on mustard plasters as a punishment for misconduct, contained in a medical contemporary, educationists in America appear to be "getting on." "Experience," says my contemporary, "has proved the necessity of 'the rod' when judiciously applied, and common sense, a capable and moderate monitor, has long ago analysed that comprehensive term into a variety of component parts, each of which is a safe and sufficient means of correction. The guidance of this authority has clearly been ignored, however, in the selection of one mode of chastisement which has recently found favour with some of our American cousins. This consists in the application of a mustard plaster to the back of the youthful delinquent.

✣ ✣ ✣

Now, to the use of mustard as a means of treatment in disease we cannot possibly raise any objection. Its position in the scale of punishments is, however, altogether different, and is certainly objectionable. As a remedy for misconduct it is said to be effectual, but we must remember that its action is by no means as easily controllable as the strokes of the cane or birch. To blister, or even to redden a boy's back in this way is to make him, at least in some degree, an invalid—a result which is not aimed at and is certainly undesirable. The new method of correction, therefore, will not do. It is too harsh to be sensible, and we can only wish for it a speedy abandonment." With these remarks, I imagine, all sensible persons will thoroughly agree.

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THE cry of "over-pressure," of which so much was heard a few years ago, we are glad to note, is not being allowed to drop. A medical contemporary lately made a few telling remarks on the health of the brain. From these remarks I quote the following pregnant passages: "The science of hygiene has accomplished so much good for society that everyone must look to its further development as an object to be desired by all well-wishers of mankind. We desire here to refer to a special branch of hygiene which seems to call for more consideration than it has received at the hands of sanitarians. *Mens sana in corpore sano* is the wish of every man, and it is our work to discover the conditions under which this is to be attained and preserved, as well as how to avoid typhoid fever and small-pox. We possess already much knowledge upon these matters, but we need fuller and more precise information; overwork and constant worry lead to brain wear, but we want to know exactly how such agencies produce their effects; we need to formulate the physical signs of fatigue and brain exhaustion, and to collect proofs as to the exact nature of their more common antecedents. The signs of rickets are often found in those who suffer from epilepsy, recurrent headaches, and other neuroses; but the exact causal connection has yet to be demonstrated, and the frequency of such causation needs to be shown by large bodies of statistics."

❖ ❖ ❖

"IT is a matter of common observation that climatic and atmospheric conditions affect the working condition of the nerve system; some men work best in warm weather, others have most strength when it is cold. Dr. Warren P. Lombard has contributed an elaborate article on 'the variations of the normal knee-jerk, and their relation to the activity of the central nervous system' in the *American Journal of Psychology*, and has there shown the relation of knee-jerk to atmospheric conditions; such exact observations are very important. What is the average strength and capacity for work in a man's nerve system, and how may it be estimated? There is a widely spread opinion that modern civilization and social pressure have caused some degeneration of brain-power, and that insanity and neuroses are on the increase; this is a question of vital importance to us. The effects of present systems of education on the brains of children may not be all for good, yet their object should be to aid cerebral evolution. It would be very interesting to have some exact information as to the brain condition of a large body of school children, founded upon observations carefully carried out."

❖ ❖ ❖

I NOTE that a half ounce of ground quassia steeped in a pint of vinegar, is recommended highly as a cure for drunkenness. A teaspoonful in a little water should be taken every time the liquor taste is felt. It is said to satisfy the cravings and produce a feeling of stimulation and strength.

❖ ❖ ❖

THE danger of infection from the use of books from circulating libraries has of late received intelligent attention, and means have been devised for the disinfection of books. The principle on which disinfection is based is the vaporization of carbolic acid by heat, whereby it is claimed that its action is more potent. Heat is applied to the outer casing of an apparatus, which is fully under control, so that a temperature which might injure the books can be avoided. The heat employed is from 150 degs. to 200 degs. F., the books being subjected to this temperature for fifteen minutes and are said not to be injured by the process.

Original Essays

"Life is not to live, but to be well."—*Martial.*

THE PROBLEM OF PAIN.

BY HONNOR MORTEN.

THROUGHOUT the metropolitan churches and chapels on the recent Hospital Sunday, there were efforts made by many preachers to explain the relation between religion and suffering. The substance of all the sermons can be shown by two quotations; the first from the sermon delivered at St. Paul's Cathedral, the second from that delivered at Westminster Abbey:—

"We cannot answer the question why it is that half the race is educated and disciplined at the expense of the agony and suffering of the other half. Be the solution of the mystery what it may, two things are clear—that sickness is the pre-determined lot of a large portion of the human race, and that Christ demands ministration to the sick as an evidence of Christian charity."

"Few things are more sure to strike a thoughtful mind than the mystery of pain and sickness in this world. It is also impossible to see on what principle evil is distributed, and so unevenly distributed. In the meaning of words, pain means punishment, and experienced observation shows that often pain of body and mind follows on faults, wilful or unwilful, the result of deliberate or foolish wrong-doing. But that accounts for only a fraction of the suffering we see around us. Our Christian faith teaches us that pain is sent as a discipline; but often it can be seen that people rebel against it—that it makes some harder, that it comes to those who seem least able to bear it, as to the weak in body, to the poor, upon whose health and strength many have to depend for their very life, and to others whose work seems to be of the highest importance to the world."

The purpose of pain is, in fact, a mystery which cannot be solved. This same problem, which yearly agitates the clerical mind when they have to appeal to their congregations in aid of those hotbeds of suffering, the hospitals, is one of the very oldest subjects of argumentation, and ever calls up a thousand questions which the ages silently accept as unanswerable. Buddha, preaching in Asia five centuries before Christ, proclaimed that the first truth was this concerning pain; that wherever the conditions of individuality exist, wherever there is birth and death, there are those unsatisfied cravings which constitute sorrow. But Buddha, not content with pointing out the prevalence of pain, as so many philosophers are, went on to point out a path in life which, if followed, avoided much grief and finally led to Nirvana. This eightfold path consists of—right views, high aims, kindly speech, upright conduct, a harmless livelihood, perseverance in well-doing, intellectual activity, and earnest thought.

After Buddha there came metaphysicians innumerable, from Plato down to Herbert Spencer, who all argued about pain and pleasure, but gave no such practical directions as those of the Eightfold Path. It is a very nice point for discussion, whether pain is the primary fact and its cessation pleasure, or whether pleasure is prior and pain the absence of pleasure; but that anything can be gained from the discussion is another matter.

In our every-day life the word "pain" usually conjures up thoughts of mere bodily suffering, though physical pangs are a very minor evil compared with the const

distresses of the mind. It has been calculated that the average amount of sickness for a man of middle life is four days in a year; and what are these four days of bodily discomfort compared with the mental weariness and worry of our daily life? Nevertheless, since physical pain springs first to our thoughts, let us consider it first, and see how far we can interpret its mystery. Its educational value is shown by the proverb, "A burnt child dreads the fire"; it is pain which teaches us what to eat, drink, and avoid, how far to walk, how long to sleep. It is the punishment which is doled out to us by Dame Nature when we break her laws of health.

Some time since, Mr. Cameron Gillies, writing in *The Lancet*, stated that "the measure of pain is a prophecy, in that same measure, of recovery," and that all inevitably fatal diseases are not attended with pain. This was very consoling to many sufferers, but unluckily it only produced from medical circles a storm of denial and indignant protest. Comfort under our sufferings cannot be got from such a vain delusion, and the interpretation of the evolutionist is even colder solace. The higher and more complicated an organization, the greater its capacity for pain. Bill Sykes knows nothing of the nervous dread of toothache, which may make the life of a philosopher perfect misery; and Bill's dog could not have felt those pangs of remorse, which, after the murder of Nancy, prove Sykes to have been slightly above a brute. A worm may be crushed even to death; it may have borne the utmost limit of its suffering, but it has never been conscious of ill equal to that which is the daily lot of the human being. When a newt has a leg snapt off by an impertinent pond bivalve, it shows few symptoms of pain, and in a few weeks the limb grows again.

Animals not being constituted as we are, cannot feel as we do; which consideration should relieve those who witness cruelties on the Continent, and is a fact which might be better impressed on the anti-vivisectionists. But we who are yearly becoming further removed from the brutes, are yearly increasing our susceptibility to suffering. We are also yearly increasing knowledge for the alleviation of pain, and in the future it is mental, not bodily pangs, we have to dread. Physical pain is practically conquered in these days when a man can have ether, while a broken bone is set, or have morphia injected to allay the throes of neuralgia. This relief is granted to the poor as to the rich, for hospitals are open to all, and there soporifics are supplied gratis. A man of strong will, also, can forget bodily pain by firmly fixing his thoughts on some absorbing subject: witness Sir Walter Scott, who when dictating an interesting passage would rise from his couch and pace the room, entirely forgetting the malady which at other times kept him prostrate. Martyrs engrossed with thoughts of heaven have sung hymns with joyful voices, though the cruel flames were burning their limbs. And if a man is not possessed of a strong will, and meets with an accident far from civilization; if his sufferings exceed a certain amount, a swoon or faint will grant relief; or, if the pain be beyond endurance there will come the great stillness and peace of death. To quote a well-known cynic, "Severe suffering (or the sufferer) soon ceases." Perhaps the worst pain for poor humanity is that which, though not acute, is long abiding; but here habit comes in to make it bearable; for each recurrence of a sensation lessens in power; and, strange as it may seem, we grow used even to pain.

Turning to the subject of mental suffering, we again perceive the wonderful truth, that as we struggle to achieve a fuller and more complete existence, we increase our power of feeling pain. "He that increaseth knowledge, increaseth sorrow"; and the wider the sympathies of a mind, the more tender a soul, the greater the strain of grief laid upon both. Much of the suffering, too, is unavailing; regrets for the past and fears for the future make bitter a present which in itself is peaceable. We often say that anticipation is the worst of an evil; and surgeons bless anæsthetics, not only for the unconsciousness gained during an operation, but because the cruel expectation and painful memories are also alleviated. Here it is that animals have the best of us, for a horse does not foresee the blow before it falls, nor does the injustice of his master cause an animal those after-pangs, which will make a man writhe on his bed from remembrance of a wrong long past and over. The waters of Lethe are the medicine most needed in the present day; the power to forget self is what we highly-strung mortals lack.

Sometimes the restless mind can be stilled by great aims, or the struggling soul satisfied by successful effort; but work is a bitter medicine which many have not the courage to drink. Hence the unhappiness amongst those who are avowedly the votaries of pleasure. The pettiness of their lives gives them no strong mental motive; they have no great hopes, the fulfilling of which could cause exhilarating joy; no great aims which are worth striving for through grief and pain, and the winning of which would be keenest pleasure. True though it be that our sufferings are increasing, the comfort is to be found in this, that without pain there is no pleasure, and that the path of progress which leads to deeper agony leads us on, also, to unknown heights of bliss. Those who never toil never taste the full enjoyment of rest; those who never climb the hill do not see the glorious view. There would be no joy in perpetual sunshine. Better the intervention of night, which betrays the beauty of the stars and the infinite extent of the universe: so the dark days of grief open our eyes to loveliness otherwise unperceived, and make evident the profound sympathies of the human soul.

With each pang of pain man should be driven further towards perfection and the full power of enjoyment. Pain is our birthright, our symbol of progress; and on it depends our true perception of happiness. Surely, then, none would barter away their intellectual being for freedom from suffering; surely none would lower their pleasures to secure immunity from pain?

Dr. PIERRE'S

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IS MODERATE DRINKING INJURIOUS?

BY DR. ANDREW WILSON.

THIRD PAPER.

BEARING well in mind the distinctions I have sought to draw between the moderate drinker and the "nipper," in previous papers, we may follow Dr. Harley's further remarks with much profit. He speaks next in order of the physiological action of alcohol—that is, its effect on the body in health, as distinguished from its effect upon a diseased frame.

Commonly, alcohol is regarded as a stimulant of the heart's action. It is believed to increase the force of the heart's contractions. Dr. Harley denies the correctness of these conclusions, and it is well that he should speak for himself on this important head.

"I take," he says, "an entirely different view of the matter, and shall now endeavour to show how the increase in the force of the heart's movements, the quickening of the pulse, the flushing of the face, the congestion of the retinal blood-vessels, as well as all the other visible appearances of accelerated cardiac functional activity, are in reality in no wise due to the stimulating action of alcohol, either on the heart's muscular tissue or the nerves supplying it, but actually to the very reverse—namely, its paralysing effects on the cardiac nerve mechanism. This may appear a strange idea to those unfamiliar with the advanced theories regarding the accelerating and restraining heart's nerve-forces. Nevertheless, it is quite consonant with the results of modern physiological investigations, which go far to prove that every function of organic life—no matter whether it be the expulsion of the urine, the peristaltic movements of the intestines, the throbbings of the heart, or involuntary respiration—acts under the immediate influence of a bifold nerve mechanism.

"For example, the human heart is endowed with two entirely different and opposing centres of nerve-force, and so retroactive are their respective functions that the sole duty of the one appears to be to regulate and control the functions of the other. To the former has been given the name of inhibitory (vagus) or restraining mechanism; to the latter that of the exciting or accelerating nerve agency. Destroy or paralyse the inhibitory nerve-centre, or arrest its power of communicating with the heart by dividing the vagus, and instantly its controlling effect on the cardio-motor mechanism is lost, and the accelerating agent, being no longer under its normal restraint, runs riot. The heart's action is increased, the pulse is quickened, an excess of blood is forced into the vessels, and from their becoming engorged and dilated the face gets flushed and the retina congested—all the usual concomitants of a general engorgement of the circulation being the result. Instead of paralysing the vagus by section, and thereby arresting its inhibitory cardiac nerve-power, paralyse it through the instrumentality of a toxic (or poisonous) agent, and precisely the same chain of phenomena will of necessity be the result. The most powerful paralyser of the vagus we at present know of is atropia; and what happens when it is given in a full dose? Nothing, more or less, than the effects we have here attributed to the section of the vagus—tumultuous heart's action, quickened pulse, congested face and eyes, &c. Alcohol acts on the heart, I believe, in precisely the same manner as atropia does, although less strongly; that is to say, it quickens the heart's action, as well as apparently increases its power, by paralysing its restraining or inhibitory nerve-mechanism."

Proceeding to speak next in order of an increased supply of alcohol, Dr. Harley maintains that it next paralyses the accelerating or quickening nerve-centre of the heart. The action of the heart, therefore, under the influence of this increased administration of alcohol, becomes slowed down, and if a sufficient quantity be given (under certain circumstances), the heart may be altogether arrested in its work, and death may result. The argument of Dr. Harley therefore is, that even the stimulant effect of alcohol is in its way injurious. He terms it a "detrimental" effect, speaking of its physiological action, and holds that it may and does act beneficially only in the way in which atropia, strophanthis, digitalis, and daturine act—these being paralysers of the inhibitory influences of the heart. The conclusion our author draws is that alcohol in this light is to be classed with the drugs just named, and as such may be and is useful in the hands of the physician in the treatment of disease.

As before, however, let us keep our minds clear in respect of the subjects of whom Dr. Harley is speaking. He instances, in proof of his interesting remarks, the increase of heart-disease as due to the use—I would say the abuse—of alcohol. For, if the facts of life are to be regarded at all, it seems clear that among "moderate" men there has been of late years no alarming increase of heart-affections such as might give sanction to the idea that the use of alcohol, say, with food, and apart from *indiscriminate* drinking day by day, has produced such serious results.

Dr. Harley's own instructive statistics prove the justice of these latter remarks. He speaks of men who are in the habit of "drinking small quantities of alcohol frequently during the day," and forcibly illustrates his remarks by a table showing "the relative frequency of diseases of the circulatory system among men between the ages of twenty-five and sixty-five employed in different industries. For it not only shows the effects of so-called moderate drinking *per se*, but likewise the still more pernicious effects of it when it is associated with intermittent muscular strain. That is to say, when the stimulus of alcohol upon the heart has superadded to it an increase in the heart's activity necessitated by oft-repeated sudden muscular efforts. For while it shows that all exposed to the partaking of alcoholic stimulants in small quantities at a time are much more frequently affected with the fatal forms of cardiac diseases than others, it in an equally unmistakable way shows that men who, like brewers, require in the course of their trades to tax their muscular strength, and thereby throw additional work upon their hearts, are far more often attacked with the fatal forms of diseases affecting the circulatory system than men equally addicted to imbibe alcoholic stimulants, but who are not called upon to make similar kinds of straining muscular efforts." The relative proportions of deaths from diseases of the circulatory system in the different classes are:—

Those not exposed to the temptation of drinking.	
Drapers and warehousemen	75
Gardeners and nurserymen	82
Printers	93
Those exposed by their avocations to the temptation of drinking.	
Commercial travellers	100
Vintners, waiters, and barmen	146
Brewers	165

In this table the excessive mortality from heart-disease occurs among the very classes who, as a rule, represent and contain immoderate drinkers in the true sense of the word. If the drapers, printers, and their neighbours

not suffer from excessive heart-mortality—and it is not contended or shown that they do—their use of alcohol conversely may be regarded as being simply more moderate than is that of the vintners, travellers, and brewers. The true comparison would be one of the total abstainers in these trades with the drinkers. The three trades first mentioned in Dr. Harley's table are not, I believe, marked by a large proportion of abstainers. It is therefore an open question whether or not abstinence would have reduced the death rates given for these occupations; although one may hardly doubt that a higher sphere of general health (and therefore a less marked tendency to heart disease) would be exhibited by men who not only abstained from intoxicants, but who, in addition, lived amid healthy surroundings and regulated life wisely in all particulars. I might also add that, rigidly speaking, and without in the least degree traversing Dr. Harley's conclusions, we may hold that heart-disease, in all the trades mentioned, may, in a certain proportion of cases, have arisen from causes other than the misuse of alcohol. This suggestion, however, does not affect the general conclusion that free participation in alcohol is a source of heart-disease.

Dr. Harley puts the case very forcibly and clearly when he says that "The reason why moderate drinking should induce not only hypertrophy and dilatation, but likewise valvular disease of the heart, is not far to seek—from its being a recognized fact that every increase in a muscle's activity is associated with an increase in its development, as well as its tension on the parts with which it is connected. Therefore, just as it happens that the dealers in horses, "runners-out," whose hearts are called upon to make oft-repeated and sudden exertions, are prone to become the victims of heart disease; in like manner the oft-repeated sudden spurts of cardiac activity induced by the frequent indulgence in small quantities of alcohol lead, for precisely similar reasons, to equally deleterious consequences in persons either already affected with or liable to become affected by heart derangements. Moreover, the congestions of the liver, accruing either from the direct action of alcohol on the liver tissues, or from its indirect effects in favouring hepatic congestions and inflammations through the instrumentality of chills, materially enhance the prejudicial action of alcoholic stimulants on feeble hearts. For all obstructions to the free circulation of the blood, no matter whether they exist in the heart itself, in the lungs, in the liver, or anywhere else, from their necessitating an increase in its labour, in order to try and overcome them, act most injuriously upon the organ—not only in direct proportion to their amount, but also in proportion to its own inherent weakness."

"LIKE BEGETS LIKE."

By Dr. E. J. Dungate.

THIRTEENTH PAPER.

Some authorities are of opinion that a suicidal tendency is more often inherited that any other form of insanity. Dr. Gall mentions the following remarkable case: "The Sieur Gauthier, the owner of various houses built without the barriers of Paris, to be used as *entrepôts* of goods, left seven children and a fortune of about two millions of francs to be divided among them. . . . None of them met with any real misfortunes, but all enjoyed good health, a competency, and general esteem. All, however, were possessed with a rage for suicide, and all seven succumbed to it within the space of thirty or forty years. Some hanged, some drowned themselves, and others blew out their brains." The author of "Sur la Hypochondrie et Suicide" relates that a man committed suicide in Paris. His brother, who came to the funeral, cried out when he saw the corpse, "What fatality! My father and uncle both destroyed themselves; my brother has imitated their example; and twenty times during my journey hither I thought of throwing myself into the Seine."

Dr. Forbes Winslow gives the following: "A. K., a man aged 57, was twice married. He was a shoemaker by trade; but, not having received any education, his wife was compelled to attend to all his accounts. He had experienced when young a blow on the head, which occasionally gave him pain. He became very intemperate in his habits, and at particular intervals he exhibited an uncontrollable temper, quarrelled with everybody, neglected his business, abused his wife, and became extravagant and melancholy. During the paroxysm he would exclaim, 'Oh, my unlucky head! I am again a lost man!' When the attack subsided, he returned to his business, was affectionate to his wife and family, most humbly begged her pardon for having ill-treated her, and expressed the greatest contrition for his conduct. These attacks came on at regular intervals. He procured a piece of rope for the purpose of hanging himself, and for some months carried it about with him in his pocket for that purpose. During one of his fits he effected his object. His grandfather had strangled himself, and his brother and sister had attempted suicide."

A case is mentioned by Dr. Maudsley where the suicidal impulse was irresistible. A married lady at thirty-one was affected with a persistent tendency to suicide. Her relatives watched her with unremitting care, but found it impossible to continue a sufficiently close guard, because she was so cunning and determined. When admitted into the asylum she was very wretched, and in her lucid intervals bitterly regretted her morbid impulse. Her attempts at self-destruction were unceasing. Once she tore her night-dress into slips, and was about to strangle herself, but was fortunately detected by her attendant. She tried to starve herself, and was fed by the stomach-pump. After four months she seemed to steadily improve; but one day, when the watch was slightly relaxed, she climbed a high wall, rushed to a reservoir, and threw herself in. Fortunately she was rescued before life was extinct, and afterwards she regained her cheerfulness, and never again attempted to destroy herself. Dr. Maudsley adds: "Her family was saturated with insanity."

Falret gives several examples of suicidal insanity, one of which concerns a family "in which the father was of a taciturn disposition; had six children, five boys and a girl; the eldest, aged forty, precipitated herself from the third storey without any motive; the second in age strangled herself at thirty-five; the third threw himself from a window in attempting to fly; the fourth shot himself with a pistol; and, lastly, a cousin jumped into a river from a trifling cause." Rush reports the case of a lady who was the subject of suicidal insanity. Her two daughters had the same tendency, and her two sons, who were twins, destroyed themselves by cutting their throats. In the *Fortnightly Review* for May, 1886, Dr. Maudsley says: "Public feeling is much shocked, as if something very unnatural had happened, when a child of eight or nine years of age commits suicide, and is prone to rush to the hasty conclusion that so fearful an act would never have been done by so young a child unless it had been subject to very cruel treatment. . . . But

if the child's family history be inquired into, it will usually be found that a line of suicide or of melancholic depression with a suicidal tendency runs through it. So it comes to pass that a slight cause of vexation is sufficient to strike and make vibrate the fundamental sicknote of its nature."

In all the annals of suicide no case can be much sadder than that of the poet Chatterton—

"The marvellous boy,
The sleepless soul, that perished in his pride."

It is common to attribute his last act to his overwhelming difficulties. His forgeries had been discovered, and friend after friend had departed from him. His character and hopes were gone. He was alone in a great city, and in the midst of wealth he pined and wanted food. But notice the peculiarity of that letter to his mother shortly before his death! He says: "I am about to quit for ever my ungrateful country. I shall exchange it for the deserts of Africa, where tigers are a thousand times more merciful than man." Dr. Forbes Winslow is of opinion that no one who is acquainted with his history can doubt that he was insane. Further, it has been proved beyond a doubt that insanity existed in his family.

An example of an inherited tendency to suicide is mentioned by Voltaire in his "Questions Philosophiques." He relates that a man, who had come to mature years, committed suicide at exactly the same time of life as his father and brother had done before him. Drinking habits often develop an inherited tendency to suicide or other acts of violence. Mr. Sedgwick cites a case "which occurred some years ago in France, of four brothers who abandoned themselves to unbridled drunkenness, which resulted in the eldest brother committing suicide by drowning, the second by hanging, the third by cutting his throat with a razor, whilst the fourth threw himself from the third floor of a house—but survived.

Dipsomania, or oinomania as it is sometimes called, is often hereditary. Enquiry concerning the family history of a dipsomaniac frequently shows that a father or mother, or some other member of a family, has been a great drinker, and has perhaps died of *delirium tremens*. Several observers have remarked that about half of the cases which came under their notice were easily traced to hereditary predisposition, and also that an almost invariable concomitant of the dipsomania was an utter disregard for truth. Mr. J. B. Thomson gives the following case in the *British Medical Journal* for April, 1858: "In the family of J. H., four brothers have been excessive drinkers; three have died from the effects of alcohol before the meridian of life, and one of them, still living, is a paralytic. Some of the descendants are of intemperate habits, likely to end in dipsomania. One of the daughters of the surviving brother is a lunatic, and has been for nine months in an asylum. In this family we have a proof among many that dipsomania is intimately allied to other forms of insanity. The mother of these four brothers was an imbecile during the latter part of her life. These brothers were all born and brought up in good circumstances, and with the benefit of a good education. Several years intervened between their deaths, yet the sad end of the one never seemed to be any salutary warning to the other, so insuperable was the desire for stimulants. One of them said to myself, that *at times* the craving was such that if a man with a drawn sword stood betwixt him and a glass of whisky, and threatened to destroy him if he reached to it, he would rush towards the glass, and run the risk of death momentarily rather than want the Circean cup." Nothing could show much more clearly than this sad example the way in which the iniquity of the fathers may be visited upon the children.

Dr. Morel gives a history of four generations of a family living in the Vosges. This history shows too plainly the frightful results of alcoholism.

"*1st Generation.*—The father was an habitual drunkard, and was killed in a public-house brawl.

"*2nd Generation.*—The son inherited his father's habits, which gave rise to attacks of mania, terminating in paralysis and death.

"*3rd Generation.*—The grandson was strictly sober, but was full of hypochondriacal and imaginary fears of persecution, &c., and had homicidal tendencies.

"*4th Generation.*—The fourth in descent had very limited intelligence, and had an attack of madness when sixteen years old, terminating in stupidity nearly amounting to idiocy. With him probably the race becomes extinct. And thus we perceive the persistence of the taint, in the fact that a generation of absolute temperance will not avert the fatal issue."

Impelled by a fatal tendency to murder, mothers sometimes destroy their own offspring. In that excellent work, "Hérédité Naturelle," by Prosper Lucas, it is mentioned that in the Court of Assizes in the department of *La Manche*, Jeanne and Marie Nell were accused of infanticide. Their ancestors had all died in the convict prison or on the scaffold. The only existing members of the families lived in a state of constant seclusion. The two sisters dwelt in an isolated house. Marie Nell became *enceinte*. The mayor, who was informed of this, feeling instinctively that some rash act would be done, went to Marie in order to prevent her from laying violent hands upon the child. His entreaties were of no avail, for the child was cruelly strangled by the two sisters, and they were condemned to hard labour for life. Many instances can be given of a homicidal tendency in the descendants of parents who were deranged. Oxford, the regicide, was under the impression that he was St. Paul, and his grandfather had the same delusion. Constance Kent, who, in 1865, was sentenced to penal servitude for killing her half-brother, was the daughter of a woman who was a lunatic.

With regard to inherited tendency to violence, we notice that Aristotle gives an example in his "Ethics," (Lib. VII). He relates "the case of a man, who defended himself for beating his father, because (he said) 'my father beat his father, and he again beat his; and he also (pointing to his child) will beat me when he becomes a man, for it runs in our family.' And he that was dragged by his son, bid him stop at the door, for that he himself had dragged his father so far."

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Mercury, Green Iodide	1/8 gr.
Morphine Sulph.	1/20 and 1/8 gr.
Opium Tinct. (Laudanum)	2 min.
Pilocarpin Muriate	1/20 gr.
Podophyllin Resin	1/4 gr.
Santonin	1/2 gr.
Strophanthus Tinct.	2 min.

FACTS ABOUT OPIUM.

By G. Winterburn, M.D.

"Oh, that men should put an enemy into their mouths to steal away their brains."—Othello.

"They are drunken, but not with wine; they stagger, but not with strong drink."—Isaiah.

THIRD AND CONCLUDING PAPER.

While it is harmful to all, it is infinitely more so to the young. There is a whole host of infant murderers, under the names of "Cordials," "Paregorics," and "Soothing Syrups." One such "Syrup" contains a grain of sulphate of morphia to the ounce. That each of these fluids causes many deaths annually, both directly and indirectly, and induces weakened health of the body and brain to a much larger number than are killed outright, are undeniable facts. No punishment in this world or beyond the grave is too severe for that person who, revelling in the ill-gotten wealth secured under a fictitious name and by false pretences, has murdered, as surely as if he or she plied the dose, so many thousands of her little countrymen. Only those who have had experience in the poorer districts of our large cities can realize the enormity of this crime. Many a little sufferer, whose demise is chronicled in the mortality records as from meningitis, marasmus, dysentery, or fever, was killed by the slow undermining of the constitution by one of these opiated preparations.

These mixtures are used, in a vast majority of cases, because they are supposed to be harmless. Many do not know that paregoric contains opium, and many a mother who would look upon the doctor who gave her baby morphine as a very bad man, gives that same baby paregoric by the teaspoonful. The remedy would be to require every bottle containing any preparation of opium to have affixed thereto a label stating the fact, and a caution against large doses or habitual use. Or, better still, prevent the sale of opiated mixtures except on a physician's prescription.

One instance will illustrate this observation. A very intelligent woman, the daughter of a well-to-do farmer and the wife of a master-painter, living in comfortable circumstances, and the mother of two lovely children, told me one day when I was making a professional call how fond her baby—four months old—was of Mrs. So and So's Syrup. "Why," said she, "she will get so mad if I don't give it to her, and scream and kick all the

* Chemists supply them in cases of ten or more, which are especially convenient for physicians and travellers.

morning." I suggested that perhaps she was in pain. "Oh, no she ain't; it's just temper, she likes the syrup so much." Inquiry developed the fact that when the child was about two weeks old it was troubled with insomnia, and the mother gave the syrup to make it sleep, supposing it was harmless. Now, so used had it become to its effects, that one teaspoonful simply made it good-natured, and it would take two or even three (nearly half a grain of morphine) teaspoonfuls to make it sleep. What would be the chances for a child so habituated to the use of opium if ever seized with cholera infantum or pneumonia? On explaining to the mother the peril she was incurring for her child, and the nature of the drug she was using, she promised to wean it from it—"as soon as the house-cleaning was through with."

But important as this view of the misuse of opium is, it is rather my purpose to direct specific attention to the intentional inebriant effect produced in adult life.

Opium is classed as a cerebro-spinal stimulant, but it is only a stimulant in the sense that alcohol is a diffusable stimulant, both of them being ultimate paralyzers of sensation, secretion, and consciousness.

Alarming and frequently fatal as are the primary poisonous effects of undue doses of opium, they do not fall within the scope of our present inquiry, nor are they to be compared to the pernicious results following in the trail of its habitual employment as an inebriant. The stooping figure, the shuffling gait, the drooping eyelid, the glazed, dull eye, the wasted form, are wonted signs of the physical decrepitude induced by this accursed drug, but these even do not excite the pity and abhorrence of the beholder as the contemplation of the moral obliquity induced. Where opium enters in, there conscientiousness walks out. All opium-eaters are chronic liars. This moral turpitude is probably caused by the direct influence of the poison on brain-tissue.

If, then, the consequences of this practice be so disastrous alike to body and mind, what need there is for carefully guarding ourselves and those committed to our care from the temptation to form the habit. How is this to be done?

First.—Missionary work is very much needed among the doctors themselves. A very large number of them are culpably careless in this matter, and not a few lamentably ignorant. The doctor who depends upon opium alone to remove pain and induce sleep has not yet studied materia medica to much advantage. Unquestionably, opiates are often prescribed as a mere convenience to cover up the ignorance of the doctor, or to gain time to watch the evolution of symptoms. The hypodermic syringe makes the administration so easy, and its effects are so quickly manifest, that the physician is often tempted against his own judgment to use it. Once used, both patient and his friends are clamorous for its repetition. In fact, it may well be doubted if the unquestionable good the hypodermic method has produced is not more than over-balanced by the ruin it has wrought. Certainly, its use by the non-professional should be discountenanced. The physician who permits a patient to learn how to manipulate the hypodermic syringe has put into his hands a servile slave who may soon become an imperious master. The carelessness of many physicians in this respect is only equalled by those who indiscriminately order the use of alcoholic stimulants.

Second.—In many cases where anodynes may seem requisite, other remedies will often be indicated and act better than opiates. In typhoid fever and in intermittents simple sugar water (one cube of white sugar to two ounces of water) taken in occasional sips, will often induce refreshing sleep. Insomnia from business worry and during convalescence, when not caused by pain, will frequently be relieved by adding to a teaspoonful of coffee, as ordinarily prepared for the table, four ounces of cold water, and giving this mixture in teaspoonful doses every ten minutes until sleep is induced. Often a single teaspoonful will lull the patient to sleep in six to eight minutes. Scutellaria, musk, nux vomica, chelidonium, phosphorus, cypripedium, valerianate of zinc of ammonia, sumbul, coca, eupatorium, aromaticum, phosphide of zinc, cimicifuga, bromide of lime or of camphor, aconite, pulsatilla, and many other remedies induce somnolency and remove the pains, nervousness, melancholy and hysteric conditions that accompany or cause sleeplessness. Often no medicine at all is needed, exercise, Turkish baths, massage or a proper dietary being all that is requsite to remove the numerous symptoms from which insomniacs suffer.

Third.—Even in cases where opium seems the best indicated remedy, it ought not to be given continuously. As soon as a small dose fails to give relief its use should be intermitted for a time, and some other anodyne given in its place. At the same time, it cannot too strenuously be emphasized that it is the physician's duty to cure the disease, not merely to lull the patient to sleep.

Fourth.—The use of opiates should be absolutely abandoned as soon as the immediate necessity for them passes. I find it quite easy to practise medicine without them, having used opium, in narcotic doses, in only three cases in the past seven years. Those, however, who think its use desirable should see to it that it does not become a habit.

Fifth.—The law regulating the sale of opiates should be made more strict. Druggists should be prevented by law from renewing prescriptions containing opium in any form. If this were done, and all proprietary preparations properly labelled, and physicians did their duty to their patients in warning them against this dangerous and seductive drug, the opium habit would die out of the land.

THE gentleman who advanced the theory that to prevent a wasp from stinging it was only necessary to take him between your thumb and finger and hold your breath, admits now that he meant a frozen wasp. He has experimented with a good lively base burner, and is willing to admit that he erred.

Highest Award, Only Gold Medal, London, 1884.

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"ISABELLA THWAITES."

The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

THE IMITATIVE FACULTY OF INFANTS.*

By PROFESSOR W. PREYER.

To determine as exactly as possible the date of the first imitative acts is of especial interest in regard to the genesis of mind, because even the most insignificant imitative movement furnishes a sure proof of activity of the cerebrum. For, in order to imitate, one must first perceive through the senses; secondly, have an idea of what has been perceived; thirdly, execute a movement corresponding to this idea. Now, this threefold central process cannot exist without a cerebrum, or without certain parts of the cerebrum, probably the cortical substance. Without the cerebral cortex, certain perceptions are possible, to be sure; many movements are possible, but not the generation of the latter out of the former. However often imitation has the appearance of an involuntary movement, yet when it was executed the first time, it must have been executed with intention—*i.e.*, voluntarily. When a child imitates, it has already a will. But the oftener a voluntary movement is repeated, always in the same way, so much more it approximates reflex movement. Hence many imitative acts, even in the child, occur involuntarily quite early. But the first ones are willed. When do they make their appearance?

If we make, for the infant to see, a movement that he has often practised of his own accord, he can make a successful imitation much earlier than is commonly supposed. Such a movement, which I employed as suitable for early imitation, is the *pursing of the mouth*, the protruding of the closed lips, which often occurs (even in adults), along with a great strain of the attention.

This protruding of the lips occurred with my child on the tenth day of life (in the bath, when a burning candle was held before him at the distance of a metre); in the seventh week it was decidedly marked at sight of a new face quite near him; in the tenth week, at the bending and stretching of his legs in the bath. It was as if the letter *u* were to be pronounced—and yet the child was wholly unable to imitate this movement so easily made by him (as late as the fourteenth week) when I made it for him under the most favourable circumstances. At the end of the fifteenth week appeared for the first time the beginnings of an imitation, the infant making attempts to purse the lips when I did it close in front of him. That this was a case of imitative movement is shown by the imperfect character of it in comparison with the perfect pursing of the lips when he makes the movement of his own accord in some other strain of the attention. Strangely enough, the imitation was attempted on the one hundred and fifth day, but not in the following days.

Further attempts at imitation occurred so seldom and were so imperfect, notwithstanding much pains on my part to induce them, in the following weeks, that I was in doubt whether they might not be the result of accidental coincidences. Not till the seventh month were the attempts to imitate movements of the head, and the pursing of the lips already spoken of, so striking that I could no longer refer them to accidental coincidence. In particular the child often laughed when one laughed to him (p. 145). The attention is now more and more plainly strained when new movements are made for the infant to see — he follows these with evident interest, but without coming to the point of an attempt at imitation in a single instance. This indolence was the more surprising as even in the seventeenth week the protruding of the tip of the tongue between the lips (customary with many adults at their work) was perfectly imitated once, when done by me before the child's face, and the child in fact smiled directly at this strange movement which seemed to please him. Imitative movements thus appear in the fourth month, which in the seventh, and even the ninth, do not succeed, or are quite imperfectly achieved. Yet in the tenth month correct imitations of all sorts of movements were frequent, and it is certain that these were executed with distinct consciousness; for, when he is imitating movements of hand and arm frequently repeated before him—*e.g.*, *beckoning* [in the general sense of making a sign] and saying—"Tatta"—the child looks fixedly at the person concerned, and then often suddenly makes the movement quite correctly.

Beckoning *(Winken)* is in general one of the movements of the infant acquired early by imitation. In my child it appeared for the first time at the beginning of the tenth month. When he was going to be taken out, his mother used to make a sign to him, and now he likewise made a sign, almost invariably, in the doorway, with one arm, frequently with both arms, yet with an expression of face that indicated that he moved the arms or arm without understanding, upon the opening of the door. The proof of this lies in the fact that, when I enter the room, the child, so long as the door is in motion, makes that movement which he at first only imitated, and does it regularly—no hint of leave-taking in it, therefore. The beckoning movement is made also at other times—*e.g.*, on the opening and shutting of a large cupboard; it has, therefore, completely lost its purely imitative character. The movement consists essentially of a rapid raising and dropping of the extended arm; it is not, therefore, genuine beckoning. Not till after some weeks were motions of the hand added, and this more skillful imitation made it seem as if the machine-like movements that were made at the opening of the door were less and less involuntary, were more and more intentionally performed as genuine signs of leave-taking. But at this period (tenth month) such an action is not yet admissible; for when I make the same beckoning movement for the child without opening the door, he repeats it often in a purely imitative fashion without deliberation, though, to be sure, the eye has an expression of great strain of attention, on account of the difficulty of comprehending so quick a movement.

Not every imitative movement can be so clearly perceived to be willed as can this one. When one enters a room in which there are a good many infants, all quiet, one can easily observe the contagious influence of crying. For, if only one child begins to cry, then very soon several are crying, then many, often all of them. So, too, when one single infant (in the ninth month) hears other children cry, he likewise, in very many cases, begins to cry. The older the child becomes, the more seldom appears this kind of undesirable imitation; but even in children four years old, quite aimless imitative movements may often be perceived (as in mesmeric patients) if the children are observed without their knowledge. For example, they suddenly hold the arms

*From "The Mind of the Child: Part I. The Senses and the ." Being observations concerning the mental development of uman being in the first year of life. By W. Preyer, Pro- f Physiology in the University of Jena.

crossed, as a stranger present is doing, and bow as he does at leaving.

A little girl in the last quarter of her first year imitated, in the drollest fashion, what she herself experienced in her treatment by the nurse, giving her doll a bath, punishing it, kissing it, singing it to sleep; and before the end of the first year she imitated the barking of the dog and the bleating of the sheep (Frau Dr. Friedemann).

Another female child imitated the following movements in a recognizable manner: in the eleventh month she threatened with the forefinger if any one did so to her, used a brush after she had seen brushes and combs, used a spoon properly, and drank from a cup, and made a kind of cradling movement with her doll, singing, "Eia—eia." In the thirteenth month the child made the motion of sewing, of writing (moistening the point of the pencil in her mouth), and of folding the arms. In the fifteenth month she fed the doll as she was fed herself, imitated shaving, on her own chin, and reading aloud, moving her finger along the lines and modulating her voice. In the eighteenth month she imitated singing, and made the motion of turning a crank like a hurdy-gurdy player when she heard music; in the nineteenth she went on hands and feet, crying "Au, au!" (ow, ow), in imitation of a dog; in the twentieth she imitated smoking, holding a cane firmly with her fingers exactly as is done in smoking a pipe. Her younger sister, in her fifteenth month, first imitated the movements of sewing and of writing; while the elder, in the nineteenth month, after repeated attempts at imitation, sewed together two pieces of cloth, without instruction, drawing the needle through correctly (Frau von Strümpell).

(To be concluded.)

POISONOUS DYESTUFFS.

A RECENT occurrence in Lyons has confirmed MM. Arloing and Cazeneuve's conclusions respecting the poisonous character of some *aniline dyes* and the harmlessness of others. Almost an epidemic happened last November with female spoolers working a particular yellow cotton yarn used for gold lace making. Dr. Carry, of the Lyons Medical Society, who was the first to notice the accidents, on being called to attend a spooler, found the patient suffering from a complication of obscure complaints. The most apparent symptoms were weakness, dyspepsia, and vomitings, coupled with a bluish-gray colouration of the gums, extending to the inside of the lips. As the yarn on winding emitted considerable yellow dust, and other working girls were similarly affected, the physician was soon on the right scent. He found that, while the accidents were caused by the dye, some yellows were very poisonous, others less so, and some quite harmless. One sort, giving out much dust, was so dangerous that one working girl had lost, within a short time, two canaries and one cat. The bird's cage hung near her machine, and the cat had probably swallowed the deadly dust with her food.

Next it was found that in a shop, where many girls were employed, no accidents were noticed last summer while the windows could be kept open, but the trouble began in November and December, when they had to be closed. With the new patients Dr. Carry had full opportunity to observe all the symptoms. Besides those already mentioned, which mostly relate to the digestive functions, others pertaining to the nervous system were noticed, such as persistent cephalalgia, insomnia, and an analgesis of the skin so complete that pin-pricks could not be felt. At the same time, the circulation was normal, there was no fever, and no albuminuria.

Some twelve or fifteen women were under treatment for the same complaint, and the recovery was in all cases very slow. But the accidents were too evidently caused by some poison to be thus dismissed without further investigation. Lead, the first that suggested itself, was looked for by a Lyons pharmacist, but proved absent. Three different specimens of dust were next given for thorough analysis to a specialist—Professor Pouchot, of the Martinière School—who confirmed the absence of lead, but found traces of antimony used as a mordant.

The first specimen, the most poisonous, was found to have been dyed with *sodium binitronaphthol*, generally known in trade as *Martin's yellow;* the second, less poisonous, with Poirier's light binitronaphthol; and the third, quite harmless, with sodic sulpho-conjugated binitronaphthol. Experiments on animals confirmed the chemist's report. Dr. Carry did not feel justified in concluding that goods thus dyed are dangerous to the wearers, but they are certainly to the weavers; and since yellows equally good but harmless can be obtained at a slightly higher cost, he thought the poisonous dyestuffs should be prohibited, or such ventilation enforced as to protect the working people from the dangerous dust.

DAHL'S CAKES.—Mr. Thomas Bond, F.R.C.S., Surgeon to Westminster Hospital, writes as follows: "7, *The Sanctuary, Westminster Abbey, June 15th,* 1888.—I certify that I have tried Dahl's Dyspeptic Cakes, and am well pleased with the results. I find that when taken after a meal nothing that I have ever tried is so effectual to relieve acidity of the stomach: that is the so-called 'heartburn.' I find also they act as a slight laxative and stimulant to the liver secretion. The best way to take them is to dip the cake into hot milk and water—equal parts. Taken in this form, they are not unpleasant, and make also a very nutritive and easily-digested food."

NATIONAL REGISTRATION OF PLUMBERS.—At a largely-attended meeting of the District Council for Glasgow and the West of Scotland, recently held in the office of the secretary, Mr. A. M. Scott, 156, St. Vincent-street, 92 applications by masters and journeymen were considered. Amongst other business done was the appointment of a permanent committee on technical education, so as to have steps taken for getting the younger plumbers in Glasgow to attend the plumbers' class in the West of Scotland Technical College, which has received an endowment from this council. It is also the duty of that committee to arrange for technical classes in the various towns in the district. Plumbers are now quite alive to the necessity of registration, and one of the pleasing features of the movement is the great number of operatives that have registered under the national system.

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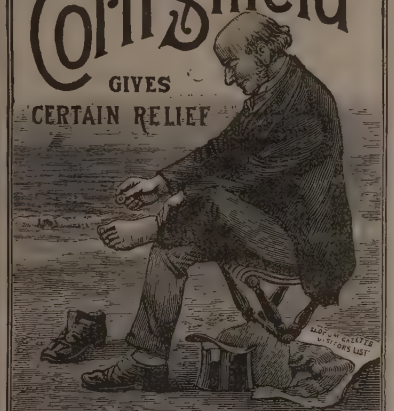

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—*Charles Mackay.*

SAVING OF LIFE BY SCIENCE.

DR. ALFRED HILL, in the course of a recent address delivered before the Society of Medical Officers of Health, said :—

Comparing the total mortality — which is a good indication of the state of the public health—in the principal towns of the kingdom during the last two decades, we learn what an enormous saving of life has been effected, suffering avoided, and money saved by the sanitary action of our own time. When the Public Health Act of 1872 provided that the permission of the Public Health Act of 1848 should be changed into a law that medical officers of health should be appointed, I remember how strongly it was objected to, on the ground that no improvement of health would result, and that the salaries of health officers would be money thrown away; an inspector of nuisances, it was said, would answer just as well; and whenever an epidemic of any kind occurred in a month or two, or even a year or two after such appointments, these objectors would triumphantly remind you of their prophetic and wise utterances. These persons could not see that the insanitary conditions of ages could not possibly be removed in a twelvemonth, and I remember saying on many occasions, "Wait for ten years, and then see what will be the result." Well, the ten years have passed away, fifteen years have glided by, and we can triumphantly say that the benefits accruing from the Public Health Act of 1872 have more than realized the most sanguine expectations, and disproved the expressed opinions of those who maintained that the compulsory provisions of the Act would prove entirely futile.

In support of this statement I will only adduce the diminution, in nine of the largest towns of the kingdom, of the total death-rate. The table which I subjoin shows the number of lives that would have been sacrificed if the death-rate of the ten years from 1865-74 inclusive had been maintained during the succeeding twelve years. The estimated value of these lives saved, based upon Dr. Farr's calculation that each human life is worth £159 to the State, is also given.

Death-rates from all Causes.

Towns.	Ten Years, 1865-74.	Ten Years, 1875-84.	1885 and 1886.	Number of Lives Saved in Twelve Years.	Estimated Value of Lives Saved.
					£
London	23·7	21·8	19·8	99,581	15,833,379
Liverpool	32·2	27·0	23·8	37,621	5,981,739
Manchester	31·1	28·0	26·4	14,390	2,288,010
Salford	28·5	25·8	21·6	7,259	1,154,181
Leeds	28·5	23·8	20·9	19,543	3,107,337
Hull	25·3	23·2	18·0	5,698	905,982
Glasgow	30·7	25·4	25·4	34,301	5,453,859
Edinburgh	25·8	20·7	18·7	15,058	2,394,222
Birmingham	24·6	22·2	19·3	13,895	2,209,305
verages of Death-rates...	27·8	24·2	21·5	247,346	39,327,994

t the recent Vienna Conference, Sir Spencer Wells tioned that our population has increased in less than fifty years fully eight millions, and he assumes that it must be a very modest estimate to regard two of those eight millions of more healthy subjects as a clear gain due to sanitation. He then calculates the money-value of these two millions of people on the basis arrived at by the late Dr. Farr—viz., a value to the State of £159 for every individual; the result is a total money-value of £318,000,000.

But there is something testifying even more to the utility of sanitary action. It is the increased average duration of human life in Great Britain during the last half century, which, according to Sir Spencer Wells, has risen from thirty to forty-nine years, accompanied by increased productive powers of the population, due to the prevention of illness and shortening of its duration.

We have seen, then, what great strides sanitary progress has recently made, and that at a constantly increasing rate, and how this more rapid progress has occurred during the best sanitary legislation and organization that this country, probably any country, has ever before known. We have learnt that the comfort, health, prosperity, and life itself of a people are, very much like other human affairs, in human hands, that "Heaven helps those who help themselves."

The encouragement afforded by the present sanitary situation should not, however, prompt the "rest and be thankful" spirit, but rather act as a still stronger incentive to further and higher effort, which, at the same time, would constitute the best proof of thankfulness for the benefits already obtained. *Laborare est orare.*

THE CAUSES OF MARSH FEVER.

THE *Journal d'Hygiene* in a review of a work by Dr. E. Maurel, of France, upon the causes of malaria, says the indispensable conditions of the disease are that the earth is loaded with organic vegetable matter in an advanced state of decomposition; that this organic matter is intimately mingled with mineral matter, and the earth is kept moderately and constantly warm and moist. The fever once declared it is generally confined to its own domain. A growth of trees stops its progress, the distance it covers does not exceed a few miles, it never reaches high altitudes, and is really dangerous only in defined marshy belts. Of the microbes or germs noted in the various scientific experiments performed by other investigators, Dr. Maurel recognizes only two. At least such is the conclusion drawn from his history of former researches; the bacillus of Klebs, Tommasi-Crudeli; and the vibratory microbe of Laveran. The bacilli exist in the air, the earth, and the water of the Pontine marsh. In the soil of marshy regions they are in the form of mobile spores changing their aspect when in the system or in a cultivating liquid. This bacillus produces the fever in a rabbit inoculated with it. The cultivating liquid is harmless if filtered, but the residue of the filtration reproduces the malarial symptoms. Cecci found this bacillus in the blood of inoculated rabbits. Others have found it in the blood of fever patients. It has been produced by culture of the malarial blood. Cuboni proved that the same process failed to produce it with blood of a person not suffering with fever.

This bacillus is succeeded by the vibratory malarial microbe of Laveran under different forms of which the filament is the essential element. Laveran says: "These filaments, whose animated nature is indisputable, represent

the adult stage of the marsh microbe, and, after development, maintain for a certain time an independent existence in the serum of the blood." Besides these, there is found in the blood of fever patients free grains of colouring matter, and white corpuscles containing coloured grains in varying numbers. These coloured corpuscles are characteristic of malaria, since the pigment they contain is produced from parasitic elements, and are never met with in any other disease. The dimensions of the Laveran parasites would appear to render them an easy study, still Maurel declares he has never recognized them, though his researches, dating from 1881, have been made in the most varied and unhealthy regions. He admits the existence of the Laveran filament, though with reserve as to its nature. Other authors acknowledge it as an indisputable fact. He attributes the appearance of the Laveran parasites to the deformations of the corpuscles which have the characteristic lesions of the fever. Marked and numerous as the fever is, Dr. Maurel's studies and descriptions of his analyzation of the earth and water of infected latitudes form a summary of long and careful investigation. He dwells upon the necessity of thoroughly understanding the blood in its normal state in cold or temperate countries before studying it in tropical marshy lands, where the heat alone changes the condition of the corpuscles. He finds that water collected from sources supposed to be pure, such as running streams or springs, even in mountainous localities, is frequently full of the malarial poison.

Filtering the water is a safeguard, as the water from the Chagres river, in Panama, is, after filtering, found free from microbes, even after standing in a bottle for a month. The energy and devotion to science which have induced Dr. Maurel to risk his life in these investigations of a most dangerous and contagious disease can hardly be over-estimated.

CARPET-BEATING IN PARIS.—The Conseil de Salubrité of Paris has prescribed the following conditions under which the beating of carpets will be permitted in the city. The carpets must be brushed and beaten in entirely shut-up rooms, and the dust deposited on the floor will be washed with water containing some disinfectant of potent action. Strips of wool, &c., must be burnt immediately. This action has been taken because of the nuisance caused by the beating of carpets in the open air in the built-up portions of the city, and because of the danger which is believed to exist, due to the fact that many of the carpets come from houses in which contagious diseases have prevailed, and that in the process of beating and shaking the germs are dislodged.

WHAT WOULD ANTI-VACCINATORS HAVE SAID?—Dr. Alfred S. Gubb lately wrote to the *British Medical Journal* and congratulated himself upon having made a lucky escape. He says: "I was asked by a lady, whom I had attended in her confinement two months before, to vaccinate her baby, as she was going into the country. I thought it preferable to await her return, and postponed the operation. It was well I did so, for within three or four days the child developed a violent attack of desquamative dermatitis, and for a week or two presented a most pitiable appearance, with the skin hanging all over it in rags and tatters. The child recovered in course of two or three weeks, but it can easily be imagined what would have been the verdict had I been unfortunate enough to have vaccinated the child. As it was, the mother asked me, 'Was I sure I had not vaccinated the child?'" This is another example of the errors so commonly resulting from *post hoc* conclusions.

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

Change as a Remedy for Disease. — Change of air should not be recklessly prescribed for people suffering from chronic and incurable disease, like cancer, consumption, and renal affections in the later stages. The doctor is tempted to promise benefits, which the result will not justify. The patient leaves home, hoping for permanent good, which he cannot possibly obtain. For the first few days he is perhaps better, while his anxious friends at home are in a state of suspense. At last the sufferer gets too ill to bear the return journey, or is in such serious danger that his friends have to be hastily summoned, often at extreme inconvenience. Surely there is great want of wise forethought on the doctor's part here. No medical attendant has any right to send from home dying patients, buoying them up with false hopes, subjecting them to great inconvenience and, perhaps, serious expense, and exposing some strange practitioner to groundless suspicion that he has hastened death by unskilful treatment or inexperience. Candour on the doctor's part will be best for the client, and most honourable to the medical attendant, and he will be acting as he would wish to be done by. Cases are not infrequent of well-to-do invalids, often self-indulgent, with few cares, and no regard for anyone but themselves. After a time they weary of their surroundings and tire of their doctor, and he, poor fellow! having treated them for ills of nerves and stomach, for sleeplessness and indigestion, for kidney disease and lung mischief, feeble heart and relaxed sore throat; having rung the changes on half the remedies in the "Pharmacopœia," and having in return earned and deserved little thanks, he, I say, begins to think that change of air would be beneficial, and could not possibly do harm. By this time usually the interesting client has lost confidence in the attendant, who cannot do the impossible, and cure diseases that do not exist, improve habits radically bad, and give a thankful, considerate heart. The least severe criticism passed upon him will be that he is an old woman—a curious sting seems to lurk in those words, by the way—who does not understand the sufferer's case. Here, then, providing the client desires it, change may be recommended. But beware of urging change where it is not desired, for depend upon it, good will not result. Moreover, the doctor must not allow his own partiality for certain places to influence him in displaying their attractions before his unwilling clients. However unsuitable the spot chosen may be, or seem to be, the practitioner should feel very certain of his position before venturing to remonstrate, or suggesting some other. If the client has set his mind upon the least prepossessing place in Christendom, he will get more good than from any other. He has reasons, whims, fancies, that weigh with him, and into which strangers cannot enter.—*Dr. Alfred Crespi in the "Provincial Medical Journal."*

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How Paints are Obtained.—Every quarter of the globe is ransacked for the materials—animal, vegetable, and mineral—employed in the manufacture of the colou one finds in a paint-box. From the cochineal insect obtained the gorgeous carmines, as well as the crim scarlet, and purple lakes. Sepia is the inky fluid charged by the cuttle-fish, to render the water o

for its own concealment when attacked. Ivory black and bone black are made out of ivory chips. The exquisite Prussian blue is got by fusing horses' hoofs and other refuse animal matter with impure potassium carbonate. It was discovered by an accident. In the vegetable kingdom are included the lakes, derived from roots, barks, and gums. Blue-black is from the charcoal of the vine stalk. Lamp-black is soot from certain resinous substances. From the madder-plant, which grows in Hindostan, is manufactured Turkey red. Gamboge comes from the yellow sap of a tree, which the natives of Siam catch in cocoanut-shells. Raw sienna is the natural earth from the neighbourhood of Sienna, Italy. When burned it is burnt sienna. Raw umber is an earth from Umbria, and is also burned. To these vegetable pigments may probably be added Indian ink, which is said to be made from burnt camphor. The Chinese, who alone can produce it, will not reveal the secret of its composition. Mastic—the base of the varnish so-called—is from the gum of the mastic tree, indigenous to the Grecian Archipelago. Bistre is the soot of wood ashes. Of real ultramarine but little is found in the market. It is obtained from the precious lapis lazuli and commands a fabulous price. Chinese white is zinc. Scarlet is iodide of mercury; and cinnabar, or native vermilion, is from quicksilver ore. Luckily for the health of small children, the water-colours in the cheap boxes usually bought for them have little or no relation, chemically, to the real pigments they are intended to counterfeit.—*The Argonaut.*

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Quack Doctors Punished. — Considering the rampancy of quackery, it is remarkable how seldom we hear of it being punished. Let us emphasize a recent instance of well-merited nemesis. Five men—Henry Chadwick, John Wilson, John Kay, Raphael Shires, and Harry Thomas—have been tried at the Manchester Assizes for conspiracy to defraud. They practised as quack doctors, though they had no qualifications. One had been a betting clerk, another a bill poster, &c. They had succeeded in extracting large sums from their victims. One client had been fleeced to the extent of £190. Two of the men, Wilson and Thomas, were servants to the rest, and were discharged. The others pleaded guilty, and were sentenced—one to eighteen months' hard labour, and the other two to a third of that term each. We agree with a morning contemporary that this punishment is too light for such impudent and injurious fraud. But two questions present themselves: Why is the punishment of quackery so limited? The market-place of every country town is systematically visited by men who defraud the poor. Some of these quacks are regular residents, and ply their business with assiduity, and not always with impunity to the public. But they go scot free; and their dupes pocket the injury they receive, no doubt feeling ashamed that they have made fools of themselves. The other point to be noticed is the contrast between the niggardliness with which people stint the payment of medical men, and their lavishness when pretenders and quacks have to be paid. The man who cannot scrape a few shillings together to pay a doctor's bill, and who will pauperize himself to escape one by going to the nearest dispensary or hospital, will soon find a guinea or two to buy a quack medicine; his friends, who will make no contribution to the ment of the honest doctor, will combine to pay a fee to any ignorant pretender who advertises his to do the impossible.—*Lancet.*

IMPORTANT ANNOUNCEMENT.

BONUSES TO SUBSCRIBERS TO "HEALTH."

HEALTH, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the PUBLISHER, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain HEALTH from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we offer the following FREE GIFTS and BONUSES to all who subscribe to HEALTH for one year or longer:—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of HEALTH, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of HEALTH weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of HEALTH so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of HEALTH, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to HEALTH, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with HEALTH should be addressed directly to the PUBLISHER, 2, Paternoster-square, London, E.C., and *not to the Editor.*

A CURE FOR WRINKLES.—A curious application has been made of the absorbable properties of lanolin in the treatment of wrinkles. Although not strictly speaking a pathological condition, it is one which is even a more serious, because less avoidable, evil than freckles. When well rubbed in, lanolin passes directly into the skin and acts as a nutrient to the subjacent tissues, with the effect of smoothing out the folds produced by the attenuation of these structures incidental to age. Several elderly ladies who were induced to give this method of treatment a trial are said to have been delighted with the result.

Sanitary Appliances, Etc.

CASCARA TABLOIDS.

MESSRS. BURROUGHS, WELLCOME & CO., of Snow Hill-buildings, London, E.C., have forwarded to us samples of their Tabloids of Cascara Sagrada, the now famous and excellent remedy for constipation and kindred ailments. The essential feature of Cascara is the absence of after effects, and of the need for continuance of purgatives and aperients after its use. The one objection to this drug—a small one it must be confessed in face of its virtues—is the bitter taste which the fluid preparations possess. Messrs. Burroughs, Wellcome & Co., by combining Cascara with chocolate, have been enabled to prepare neat and handy tabloids, containing two grains of the dry extract in each. One or more Tabloids may be taken at bedtime. They are easily carried, and in price are most moderate. These Tabloids are, in every sense, a most welcome addition to the *materia medica* alike of the household and the physician.

MINERAL PRODUCTS OF WIESBADEN.

MESSRS. INGRAM & ROYLE, of 52, Farringdon-street, London, E.C., who act as agents for and importers of the most important mineral waters of the world, have recently added Wiesbaden Water and other products of these famous springs to their extensive *répertoire*. The water of Wiesbaden, according to the analysis of Fresenius, exhibits a preponderance of chloride of sodium—about 525 grains of this salt existing to the gallon. The Kochbrunnen is the chief spring whence the supply is derived. The water is also rich in chloride of ammonium, and contains lithia and arsenic in addition. The prevailing gas is carbonic acid. For gout, these waters have long enjoyed a high and deserved celebrity, the thermal waters being used extensively for baths as well. In digestive disorders associated with gout, Wiesbaden Water is also valued. In catarrh of the stomach and intestines, in nervous disorders, and in many female complaints, the Kochbrunnen spring has a high reputation. In addition to the water, a special soap, lozenges, and salts are prepared from these waters, and are sold by Messrs. Ingram & Royle. The medical profession, through the enterprise of the firm just named, have therefore now acquired an opportunity of testing at home the value of the Wiesbaden products. We expect to hear that a good and liberal use has been made of these valuable waters, &c., in British practice.

Our Letter-Box

"Conference [maketh] a ready man. —*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* MR. A. P. WATT, THE PUBLISHER, *at the same address.*

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules:—

1. All questions are answered free of charge in the columns of HEALTH.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. **No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.**

LETTERS TO THE EDITOR.

THE MENTHOL CURE OF CONSUMPTION.

SIR,—I have been looking anxiously for some testimony as to the efficacy of the menthol cure in cases of consumption (see HEALTH, No. 269, p. 134), and trust that you will make room in your paper for the following statement from one who has tried it. I am one of the great family of consumptives, and so serious is my case that two of the best-known physicians in Edinburgh advised me some time ago to seek a warmer and more equable clime as the only chance of prolonging my life. When the notice appeared in the papers pointing out the benefits to be derived from the injection of menthol and oil, I at once gave the treatment a trial, and the following are the results, so far. I have gained steadily in weight; the cough is very much easier; the expectoration is less, and, instead of being thick and purulent, as formerly, is now fairly healthy; sleep is quite undisturbed; and the changes in the weather pass almost unheeded. I wonder whether others have derived similar benefits; because, if so, they should make the cure as widely known as possible.—Yours,

R.

20, *Hazelbank-terrace, Edinburgh.*

VEGETARIAN EXPERIMENTS.

SIR,—In your issue of 8th inst., under the heading "Vegetarianism," you record some experiments made by Dr. J. Rutgers, in which the remarkable statement occurs that Dr. and Mrs. Rutgers experimented upon a "vegetable diet" which included, among other items, Liebig's Extract of Meat. It is needless to point out that this article is in no sense a vegetable; nor is it in any way connected with a vegetarian dietary, and its inclusion in the doctor's "vegetable" *régime* must, of necessity, destroy whatever value might otherwise attach to the experiment. One other circumstance I may point out. Probably, the experimenters have been, for many years, living upon a diet in which animal flesh is included. As against so long a period the short space of five weeks of the use of a so-called "vegetable diet"—including, be it

NERVOUS EXHAUSTION.

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Dr. VINES, Fellow of the Royal College of Physicians, writes 19th September 1885: "Having used MR. PULVERMACHER'S BELTS for many years, in the course of medical practice, I am in a position to speak of their great value as a curative agent in cases of nervous disease or functional malady where Electricity is likely to be serviceable. I am entirely convinced of their efficacy."

Dr. C. HANDFIELD JONES, F.R.C.P., F.R.S., Physician to St. Mary's Hospital says: "I am satisfied that MR. PULVERMACHER is an honest and earnest labourer in the field of science, and I think he deserves to meet with every encouragement from the profession and scientific men."

Dr. GOLDING BIRD, M.D., Physician, Guy's Hospital, says: "I can hardly recommend MR. PULVERMACHER'S INVENTION too strongly to the notice of my medical brethren."

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remarked, Liebig's Extract of Meat—is taken as a sufficient test to "lead Dr. Rutgers to condemn an exclusively vegetable diet." Surely the subject is one of sufficient importance to warrant experiments being conducted in such a manner, and for such a period, as will at least give some reasonable prospect of accurate conclusions being arrived at.—Yours faithfully,

JOSEPH KNIGHT,
Secretary of the Vegetarian Society.
75, *Princess-street, Manchester.*

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor.*]

NEILZA.—Try the plan of bathing the affected parts with hot water in which Tidman's Sea Salt has been dissolved, and apply thereafter a little St. Jacobs Oil as a liniment.

OLD READER.—Try a hot salt-water bath at bedtime, and take twenty grains bromide of potash in a wineglass of water, between meals, twice daily, when the pains are troublesome.

OCCULT.—Lamplough's Pyretic Saline is the best of saline aperients; but neither this nor any other aperient, however, is meant to be taken continuously.

E. F. F.—Apply to the French Hygienic Society, 56, Conduit-street, London, W., for their advice regarding hair-dyes. Try the Pommade Trichophile (see advt. in HEALTH).

A. G. M.—Take fifteen drops Fer Bravais in water, after your meals, thrice daily; avoid beer and all stimulants. Take vegetables in plenty.

PRINCE.—Use Bayley's Spermaceti Soap (17, Cockspur-street, Pall-mall, London, S.W.) and soft water for washing, and dust on the palms Woolley's Sanitary Rose Powder.

NOTA.—Messrs. E. Ward & Co.'s, of Bradford, Sanitary Woollen Underclothing should be regularly worn by you all the year. Take, also, a dessertspoonful of Thomson's Cod Oil Cream after your meals.

ALMA.—Try Dahl's Cakes as a remedy for constipation. They are not drugs, but an admirable form of food and digestive aid combined.

E. B.—The following is an iron and quinine mixture, which should be used: Sulphate of quinine, eight grains; sulphate of iron, sixteen grains; dilute sulphuric acid, eight minims; water, to eight ounces. A tablespoonful thrice daily.

MANX.—Drink Pitkeathly Water regularly, and avoid much flesh flood. Substitute for the tonic you are taking fifteen drops Fer Bravais, in water, after your meals, thrice daily.

R. R.—Dr. Pierre's Eau Dentifrice should be used night and morning by you as a mouth wash, and the Tooth Powder of Dr. Pierre for the teeth.

M. P. R.—Such a book as "The Family Physician" (Cassell & Co.) would suit you. Beasley's "Druggist's Receipt-Book" (Churchill) is also a good reference-book.

ELSIE.—We have often had occasion to point out that marriages of cousins, provided there is no ailment of constitutional kind on either side, are as likely to be as healthy unions as those of strangers in blood. There are many marriages of persons not related which show most unfortunate results in the way of idiocy, &c.; while there are many examples of healthy cousins marrying with good results as far as their own health and that of their children is concerned. There is, of course, a probability that where weakness exists, it might be intensified by several intermarriages in the same line between near relations. Otherwise, and in the case of healthy persons, as we have before said, there is no reason why cousins should not marry.

GEORGE FRANCIS.—For styes try the following: Acid boracic, ten grammes; distilled water, three hundred grammes. Dissolve. With a wetted piece of wadding drop some of this solution on the stye several times a day.

LEX.—We do not know the book you name, but its title is quite paradoxical to begin with. "The Ladies' Physician" (Cassell & Co.), or "Advice to a Wife," by Chavasse (Churchill), and his "Advice to a Mother," are all good books.

NOUGAT.—Our best advice to you is that you should purchase the pamphlet, "A Lecture to Young Men" (post free, 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and study carefully what is said therein regarding rules for health, diet, and the use of tonics.

BEASLEY.—The Geddes' Hemlock Bark Extract should be tried by you. As an outward application for the disease you name, it is most successful. The address of the firm is 249, High Holborn, London, E.C.

A. BINTHORPE.—Superfluous hairs can only be satisfactorily removed by electrical means. Read the article on this subject in HEALTH, No. 149. We can send, if desired, on receipt of stamped addressed envelope, address of a specialist who removes hairs in this way.

GEORGE R.—Do not wet the head at all in the morning bath. Take it tepid now that the warm weather has come, and then try it cold. Plunge into the bath immediately on rising. Of course, we are presuming you have sufficient reaction and warmth afterwards. Do not stay in the bath longer than suffices for a thorough sponging of the body.

OPERATIVE.—To make a suitable ointment try the following: Gall and opium ointment, to be had at any druggist's; or acid tannic, twenty grains; bismuth subnit., one drachm; pulv. opii., ten grains; paraffin mollis., one ounce.

WHEEZY ONE.—The following is a safe cough mixture: Chlorodyne, one drachm; ipecacuahna wine, one drachm; syrup of squills, one drachm; glycerine to make up two ounces. Label: "A teaspoonful in a little water at intervals."

BOULOGNE.—See advice given to "Bella" in HEALTH No. 271.

ROBERT HUTCHISON.—All you require is perseverance in your rules of healthy living. Try a cold sponge or tepid bath each morning; and take, after your meals, a wineglass of Vin Mariani (Roberts & Co., New Bond-street, London, W.) twice daily. Plenty of open-air exercise should also be taken.

C. PARK.—One of the simplest cures for constipation is to use Dahl's Cakes (advertised in our pages). Read the notice of these cakes from the pen of Dr. Bond in the present issue.

HOLYROOD.—It is possible that your trade, if it involves late hours in a heated composing-room, may be against you. Try the plan of living on very simple food—avoid cheese, pastry, salt meats, and other indigestibles—and after your meals take five drops of Pure Terebene (Burroughs, Wellcome & Co.'s) on a piece of sugar, as a cure for flatulence and distension. See that you rest after your meals regularly, as a health condition. You must also avoid constipation; see advice given to "C. Park" above, and also to "Hereward" in last week's number. By regulating your digestion in this way your troubles will probably disappear.

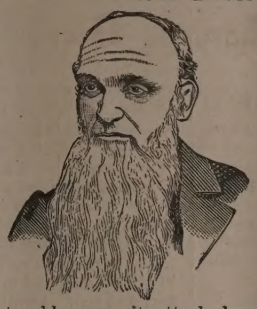
C. J. DODD.—If the irritation is caused by worms, try an injection of cold tea, or one of infusion of quassia daily. If these fail you might try half an ounce of tincture of the perchloride of iron, dissolved in a pint of water. The ointment recommended to "Bella" in HEALTH No 271, might however be tried first of all, as an application which might probably relieve the trouble in case it proceeds from other causes than those you suspect. If not cured, write again.

PAMELA.—Drink a little Pitkeathly Water regularly morning and night; using the variety to which Lithia is added.

FOREIGNER.—A result of hot weather: dust Woolley's Sanitary Rose Powder on the feet after washing.

C. PETERS.—You should see Harness's Xylonite Truss (52, Oxford-street, London, W.); it is washable and very durable, and can be made so as exactly to fit any case of hernia.

"FROM CABIN-BOY TO CAPTAIN."



"IF I had paid ten pounds a bottle for Warner's SAFE Cure it would have been cheap, as to it I owe my life," exclaimed Captain Paige, of 5, Southwell Grove-road, Leytonstone, Essex, who has recently been completely restored to health, after years of sickness, by the use of this medicine. The captain's story is an interesting one, and we give it in his own words: "Ever since a child I have lived upon the water, rising from cabin-boy to captain. I visited nearly every part of the globe, having no ill-health for more than twenty years; but when trouble came it attacked me in the shape of sharp, acute, knife-like pains in the right side. These at times were so severe that I would involuntarily fall on the deck, and was obliged to be carried below. At last I was obliged to leave my ship and return home. The doctors said I had muscular rheumatism. They did no good, and I slowly grew worse. Finally I consulted the physicians at the hospital, who, on making an examination of my water, said my case was hopeless, and that they could do me no good. My own medical man informed my family that I might last a month, but there was no hope of recovery. While in this deplorable condition my son procured me a bottle of Warner's SAFE Cure. I took the medicine faithfully, and at the end of ten days was very much better, and by a month able to walk some distance. After taking it continuously for a few months my health was completely restored. I eat and sleep well, have not a pain nor ache, and have dumbfounded my friends by my recovery and cure. I recommend the medicine far and near, and take pleasure at all times in letting people know of its wonderful virtues.

ARTHUR OWEN.—We think you only require fresh air and gentle exercise (as in walking) to tone up your system. There is evidently very little the matter wrong with you, and you might try a tea-spoonful of the Syrup of the Hypophosphites in a wine-glass of water after your meals, twice daily, as a tonic. It is probable a tepid bath each morning would benefit you; and you might take into your consideration whether residence in a more northern and bracing part of London would not be better for you than your present situation.

T. MASON. — Take the tonic above ordered to "Arthur Owen," and note the directions also given regarding open-air exercise and a tepid bath.

RAISIN.—They are supposed to act as slight stimulants. Take them as dessert after dinner once daily. They have no special liver-action.

JAMES DUNCAN.—Possibly some irregularity in diet. We should advise you to look well after your food, and if troubled again take five drops Pure Terebene (Burroughs, Wellcome & Co.'s) on a piece of sugar after your meals. See also that you rest regularly after eating, and avoid cheese and like indigestible foods.

IGNORAMUS AWAITING.—You may keep your mind perfectly easy. In the first place, there would be no possible results accruing from any treatment such as you received after a lapse of eight years; while what you do mention as symptoms are perfectly common to many healthy persons, and only require rest and a tonic to remove them. The bruised mark is probably due to some accidental injury, and has certainly no connection with what you mention. There need be no hesitation in taking the step you name in all confidence. If you desire any further information, send stamped addressed envelope.

NITRAM. — Limit your smoking by all means, since it is probably affecting your eyesight, and more especially as you are already near-sighted. Try the effect of using a simple eye-lotion, morning and night, made by adding six grains sulphate of zinc to six ounces of rose water. Dilute a little of this lotion with water, and then use it for the eyes. Avoid reading and writing at night especially, and apply at bedtime a little pure vaseline to the lids.

DOMESTIC SERVANT.—Give the Tonga of Messrs. Allen & Hanbury a trial for neuralgia. This medicine can be had from any good druggist in your city.

B. ROACH.—Try Dahl's Cakes (see advt. in our pages), and take half a cake to breakfast and tea. Limit the amount of tea you consume, and take also plenty of fruits and vegetables, with Scott's Midlothian Oat Flour regularly.

ROBERT GRAY.—1. Use Scott's Midlothian Oat Flour for breakfast and supper, and replace tea by this flour. For the rest, see that you avoid cheese and other indigestible foods. 2. We should recommend you to use Dr. Pierre's Teeth Preparations, advertised in our pages. No; the first recipe is right.

E. F. F.—Give the child Mellin's Food only. Now that we are coming to the hot season of the year you must be on your guard against infantile diarrhœa; and Mellin's Food as a proper infant dietary will prevent any tendency to this ailment.

C. PRAED.—1. You may try Messrs. Tyler's cure for sore feet with all safety. 2. No increase, as far as we know.

SANTONIN.—Messrs. Burroughs, Wellcome & Co. are the wholesale makers; so you must apply to any good druggist, who will procure the Cascara Tabloids for you.

G. H. S.—Read the pamphlet, "A Lecture to Young Men" (post free for 1s. 1d. from Mr. Renshaw, 356, Strand, London, W.C.), and note its directions as to diet and health-rules at large.

E. A. P.—Darwin's "Expression of the Emotions" is a book you should read. It will give you particulars of the muscular acts involved in the display of the feelings.

CHARLES ROBERTSON.—1. Try the east coast in preference to the south—*e.g.*, Yarmouth or Lowestoft. 2. See advice given to "Robert Gray" above regarding the use of Scott's Oat Flour.

META. — Dust a little of Woolley's Sanitary Rose Powder on the hands after washing, and take fifteen drops Fer Bravais after your meals, in water, twice daily.

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